X021947

510(K) SUMMARY

Submitter of 510(k):

Lucius Metals Com.

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Contact person:

Dae Kyu Chang

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Date of Summary:

June 5, 2002

Trade name:

CERANUM 87

Common:

Dental casting alloy

Classification name:

Gold based alloys and precious metal alloys for

clinical use

Product code:

EJT

Classification:

Class II

Legally marketed device: DEGUDENT GS

510(k) number: K905387

SUMMARY OF THE TECHNOLOGICAL CHARACTERISTICS

Test methods applied: as in ANSI/ADA 5 and ISO 9693

Comparison of composition:

COMPOSITION (WEIGHT)

	Au (%)	Pt (%)	Pd (%)	In (%)
Degudent GS	86.00	9.70	2.20	2.0
Ceramum87	86.95	8.87	1.15	1.0

Comparison of physical and mechanical properties:

Alloy	Melting Point Range (°F)	Hardness (Vickers)	Yield Strength (psi)	Elongation (%)	CTE (x10 ⁻⁶ / °C)	Density (g/cm3)
Degudent GS	1,949-2,174	155	58,000	8.0	14.4	18.5
Ceranum87	2,008-2,079	150	53,600	9.0	13.4	18.6

Discussion:

Since the composition of the legally marketed alloy and the new device is very similar, it may be assumed that the biological compatibility of the alloys is also very similar.

Conclusion:

The main elements and their concentration are almost identical. CERANUM 87 is a High Noble, Micro-fine, Yellow, Gold based alloy to be used for inlays, onlays, single crowns, bridge, implant superstructures and substrate for medium expansion with lower fusing porcelains and indirect restorative composites. CERANUM 87 is a high gold ceramic alloy, which heightens the porcelain esthetics of the restoration and provides strength, durability and color of gold. Despite minor differences in the materials, we believe that CERAUM 87 is a substantially equivalent to DEGUSSA AG's DEGUDENT GS. These changes do not affect safety or effectiveness.

Statement of indication for use: CERANUM 87 is intended for manufacturing:

- Inlay / Onlays
- Crowns
- Bridges
- Implant superstructures



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

AUG 2 6 2002

Mr. Dae-Kyu Chang Manager Lucius Metals Com. 4241 Farquhar Avenue, #2 Los Alamitos, California 90720

Re: K021947

Trade/Device Name: CERANUM 87

Regulation Number: 872.3060

Regulation Name: Gold-based Alloys and Precious Metal Alloys for Clinical Use

Regulatory Class: II Product Code: EJT Dated: June 5, 2002 Received: June 13, 2002

Dear Mr. Chang:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies.

You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4613. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely your

Timothy A. Ulatowski

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices Office of Device Evaluation Center for Devices and Radiological Health K021947

STATEMENT OF INDICATION FOR USE

CERANUM 87 is intended for manufacturing:

- Inlay / Onlays
- Crowns
- Bridges
- Implant superstructures

(Division Sign-Off)
Division of Anesthesiology, General Hospital,
Infection Control, Dental Devices

510(k) Number: <u>\$621947</u>